RM6

MV distribution
factory built assemblies
at your service

Anglais

installation instructions

on–site extension of a switchboard

Schneider Electric

Released for Manufacturing
Printed on 2008/07/16

foreword **3**
symbols and conventions 3
as per iso 3864−2 3
distribution rules 4
safety rules 4

general description **5**
description of the double extension modules 5
checking the accessories delivered with the module 5
description of the assembly kit 5
safety instructions 6
verification before installation 6
presentation of the mounted assembly 6

access to the extensibility bushings **7**
removing the protective covers 7
removing the protective covers 7

preparation of substations to be fastened to the floor **9**
fastening to the floor 9

preparing of the double extension module **11**
placing assembly parts 11
placing the assembly screws 11
placing assembly stops 12

placing the link **13**
removing the insulating plugs 13
earthing the screens on the mobile connections 13
placing mobile connections 14
plugging the double extension module in 15
tightening the extension module 16

placing the strip **17**
placing the mimic panel strip 17
placing the trough strip 17
placing the strip on the front panel 17

fastening instructions for civil engineering and connection **19**
fastening to civil engineering 19
earthing the extension module 19
connecting HV cables 19
LV connection 19

Released for Manufacturing
Printed on 2008/07/16

symbols and conventions

Caution:
you will find all the symbols below throughout the document, indicating the hazard levels depending on the different types of situation.

as per iso 3864–2

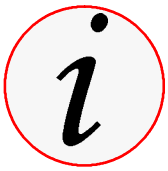
DANGER: failure to follow this instruction will result in death or serious injury.

as per iso 3864–2

WARNING: failure to follow this instruction may result in death or serious injury.

as per iso 3864–2

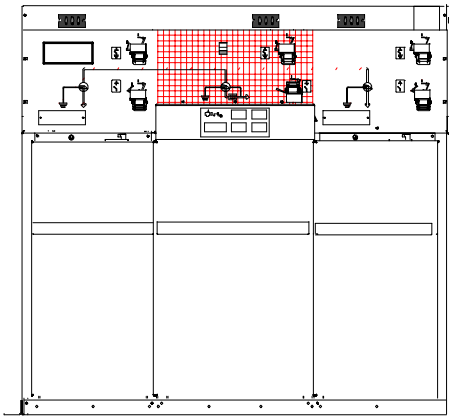
CAUTION: failure to follow this instruction may result in injuries.
This alert signal can also be used to indicate practices that could damage the RM6 unit.

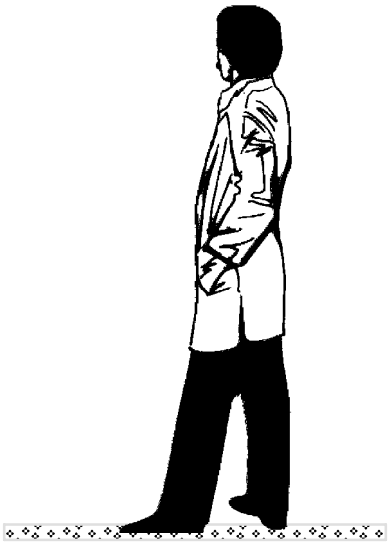


INFORMATION-ADVICE
We draw your attention to this specific point.

contact the Schneider Electric service unit for diagnosis and advice

Call your sales representative who will put you in contact with the closest **SCHNEIDER ELECTRIC** group service centre.
You can log on to:
www.schneider--electric.com





distribution rules

The aim of this publication is to enable the RM6 unit to be installed correctly.

This document is not a commercial document.
It is a strictly technical document drawn up by **Schneider Electric.**

safety rules

CAUTION

All the operations described below must be performed in compliance with applicable safety standards, **under the responsibility of a competent authority.**

WARNING

The contractor must be certified and authorised to manipulate and perform work on the RM6 unit.

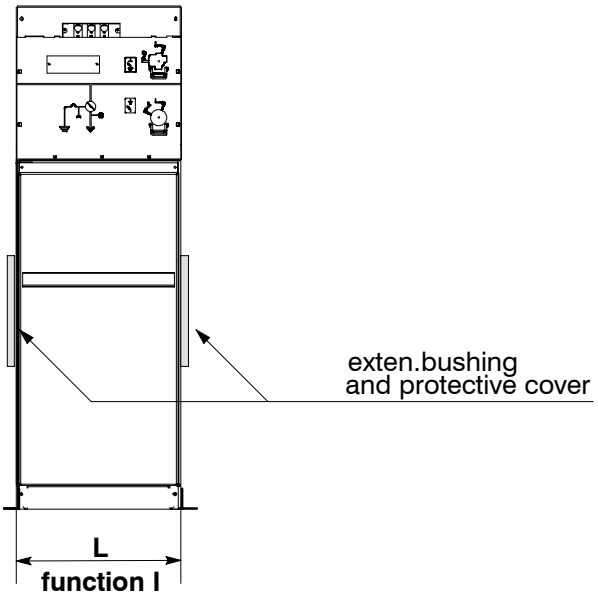
CAUTION

Only undertake the work after having read and understood all the explanations given in this document.
If you have any difficulty complying with these rules, please contact **Schneider Electric.**

description of the double extension modules

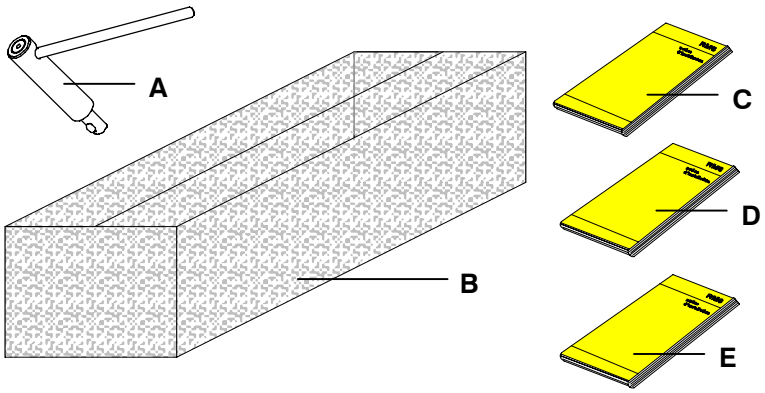
double extensibility (DE)

function	L
I	472 mm
Q	472 mm
D, B	572 mm



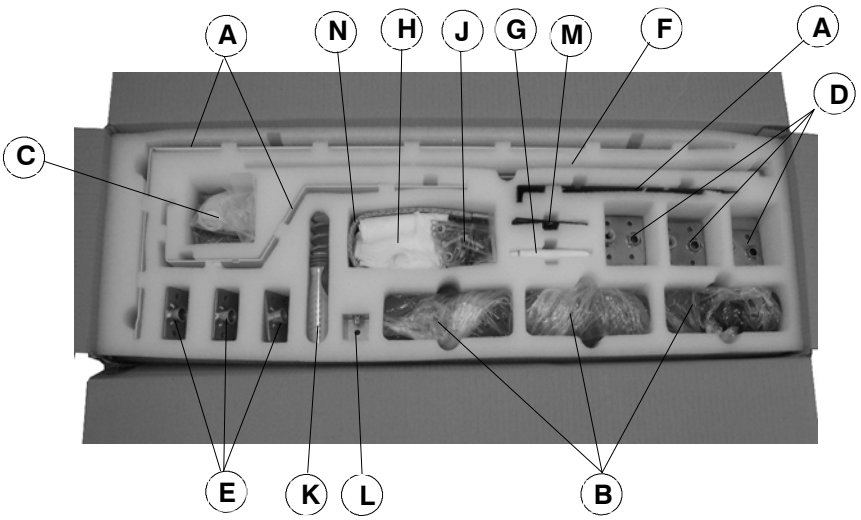
checking the accessories delivered with the module

A : 1 operating lever
B : 1 assembly kit
C : 1 user manual **N°07897073EN**
D : 1 user manual **N°07897071EN**
E : 1 installation manual **N°07896870EN** for on–site extension of the switchboard



description of the assembly kit

A : a protective strip, including:
– 4 fixing parts
– 1 strip in 3 sections
B : a set of 3 moving couplings
C : 3 nylon wires (each 1 meter in length)
D : a set of 3 assembly parts
E : a set of 3 stop parts
F : 3 M10 threaded rods
G : 3 tubes of silicone grease
H : a pair of gloves
J : a bag of nuts and bolts
K : extractor
L : a cloth
M : 3 earthing springs
N : earthing braid



safety instructions

CAUTION

It is recommended that you carefully read the entire manual before starting to assemble this kit.

IMPORTANT: this extension must be conducted with power OFF.
The breaking devices in the switchboard that can be extended on the right (RE) must be open and the earthing switch closed.

This extension must be completed by a competent technician, who is familiar with both electric equipment and safety locking rules.

verification before installation

CAUTION

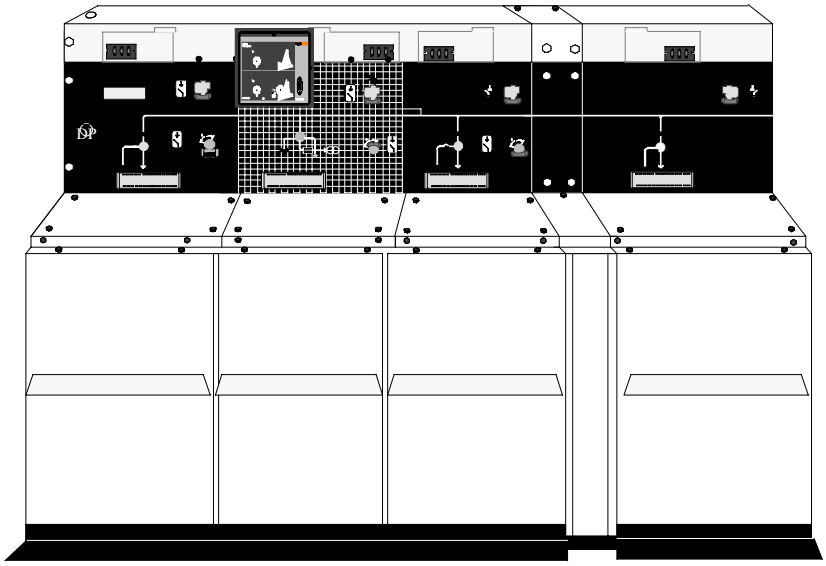
The civil engineering slab should be carefully finished, **and must not have any defects concerning its evenness** that are greater than 7 mm for a length of 2 m.

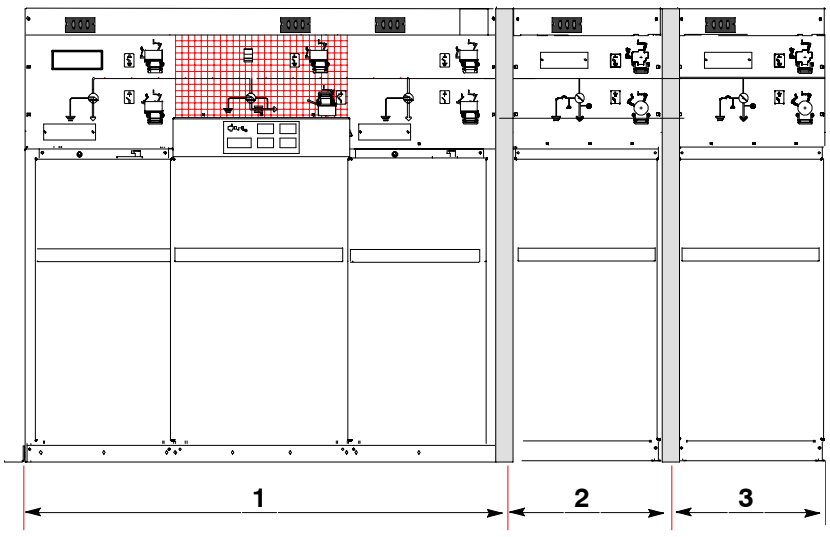
To prepare for fastening to civil engineering refer to the installation manual :
(chapter : connection instructions)
Ref : 07897071.

presentation of the mounted assembly

CAUTION

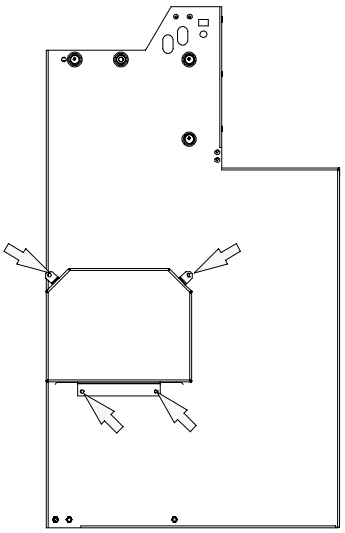
do not transport or handle 2 assemblied cubicles





1 : substation to be extended (RE).
2 : double extension module (DE).
3 : double extension module (DE).

removing the protective covers



Remove the 3 covers that ensure the protection of the extensibility bushings, 3 x HM6 nuts
+ 1 x HM6 screw per cover

Extension module :
– 1 cover – right side.
– 1 cover – left side.
Substation to be extended :
– 1 cover – right side.

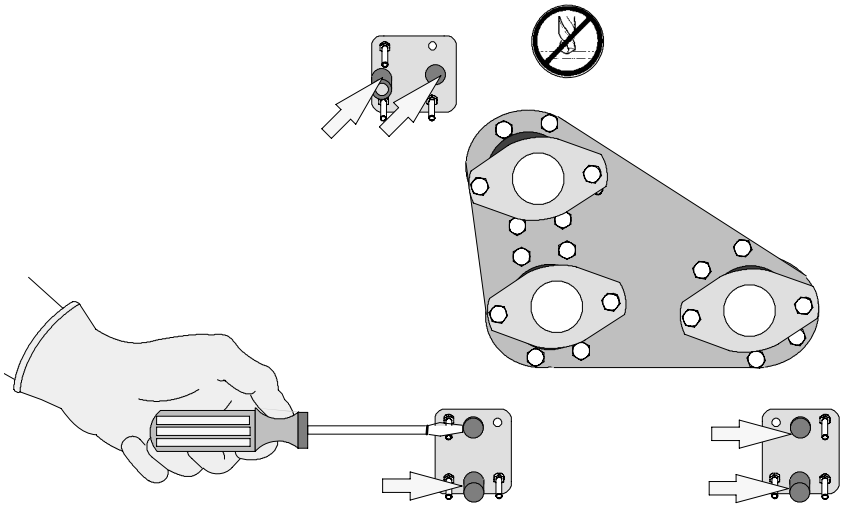
removing the protective covers

on the assembly part

CAUTION

The 6 plastic plug must first be removed before presentation of the extension module.

Careful, 3 small plastic plug will be reused.

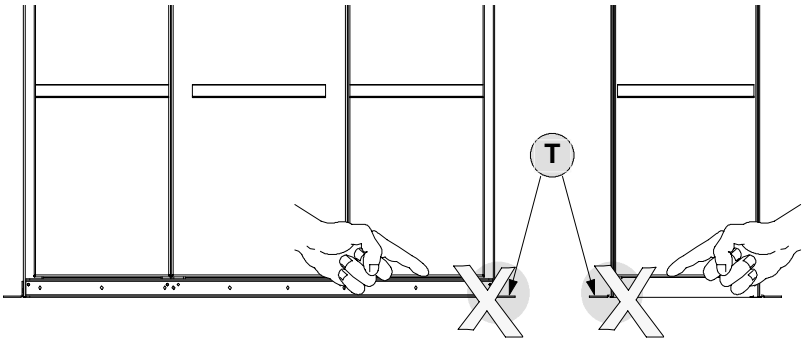


fastening to the floor

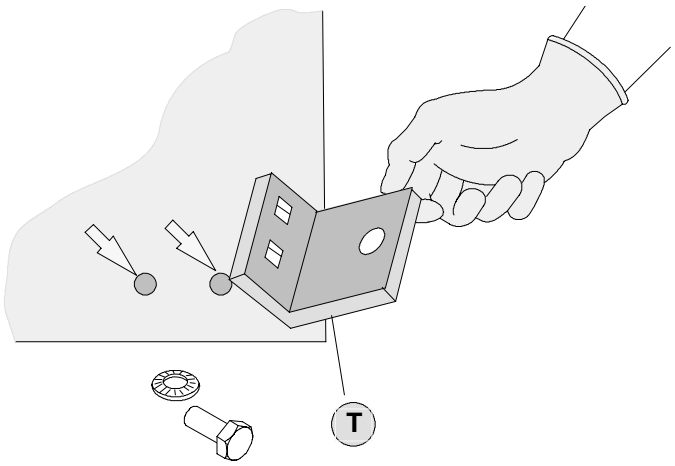
removing brackets

CAUTION

The 2 brackets must be removed, in order to ensure correct assembly for the remaining interventions.



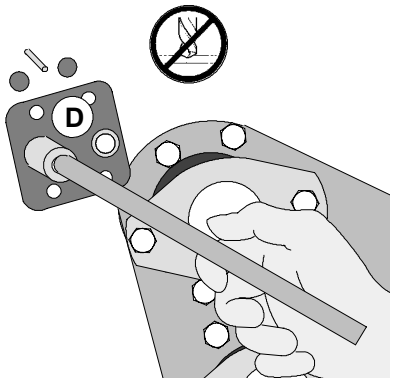
Eliminate the 2 **T** brackets between the 2 substations.



placing assembly parts

CAUTION

Make sure that the 3 threaded rods can be correctly screwed in by hand into the 3 threaded holes (M10) on assembly parts (D) of the substation to be extended. (screw in roughly 2 cm).



Locate on the substation to be extended, the position of the threaded holes on assembly parts.

assembly principle

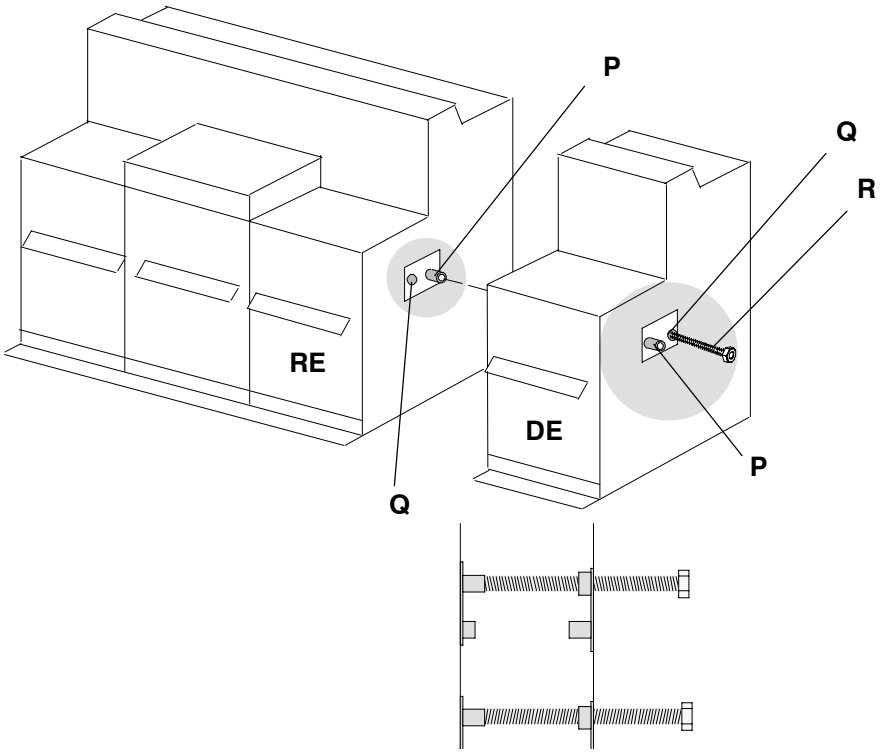
The smooth hole on the assembly part to be mounted on the double extension module, must be aligned with the threaded hole M10 on the assembly part of the substation to be extended.

Fasten the 3 assembly parts according to the principle above, on the right side of the **DE** module 3 nuts +3 washers.

P : threaded hole M10

Q : smooth hole

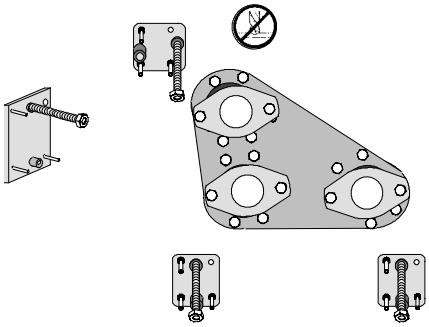
R : threaded rod M10



placing the assembly screws

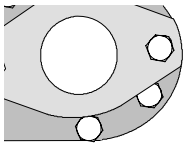
The smooth hole must be opposite the threaded hole on the substation to be extended.

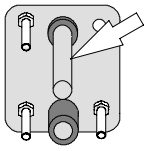
Fasten the 3 plates using the 3 nuts + 3 washers.



Place the 3 threaded rods in the smooth hole on the assembly parts, the threaded rods should pass through both sides of the extensibility module.

placing assembly stops



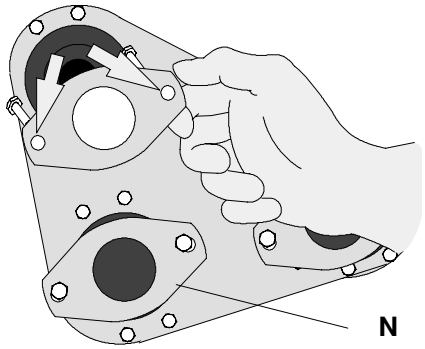


Place the 3 assembly stops, (3 x HM6 nuts + washers) on the left side of the extension module DE, the threaded rods should pass through the hole in the stops.

removing the insulating plugs

CAUTION

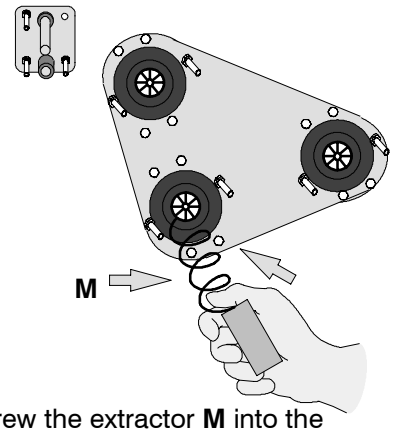
The 3 clamps and stoppers located on the right side of the extension module must not be removed.



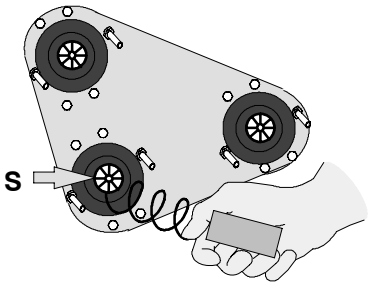
Remove the 3 clamps (**N**) that maintain the insulating plugs on the substation to be extended and located on the left side of the extension module.

CAUTION

The silicon stoppers are not re--usable.

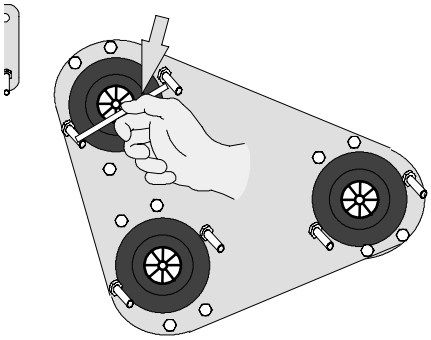


screw the extractor **M** into the plug's axis.

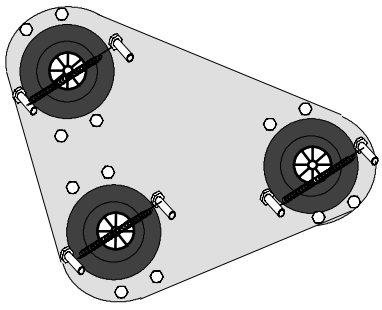


Put pressure alternately on the right and the left until the plug **S** comes unglued, then remove it.

earthing the screens on the mobile connections



Mount a spring for earthing continuity of the 2 M6 bushing pins

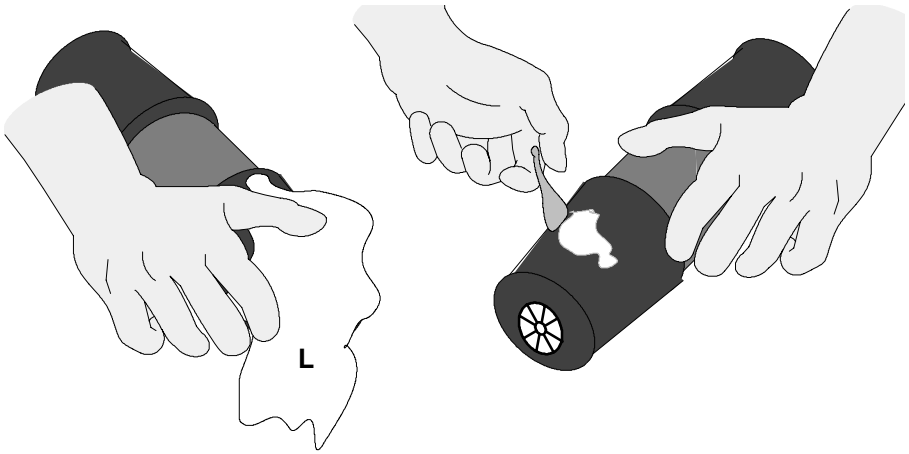


on the substation to be extended.

placing mobile connections

CAUTION

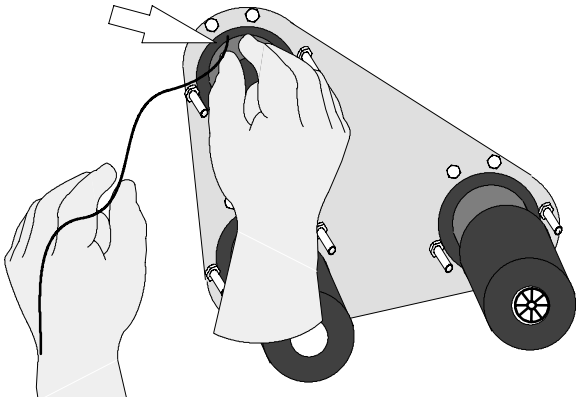
do not substitute the supplied silicone grease with another



Clean well with a cloth **(L)** and place a uniform layer of silicone on the tapered parts of the mobile interface connections.

Use a bag of silicone grease for each part.

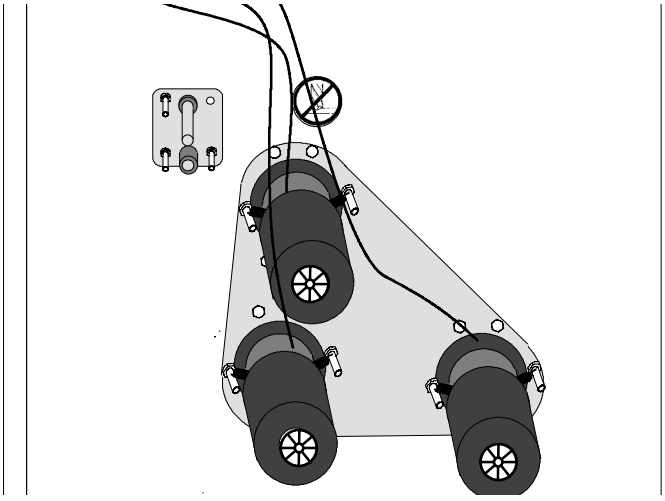
placing the nylon thread



Before inserting the mobile connection into the bushing, a nylon thread must be placed in

the bushing, it allows for the air captured in the interface to be evacuated.

placing the mobile connection



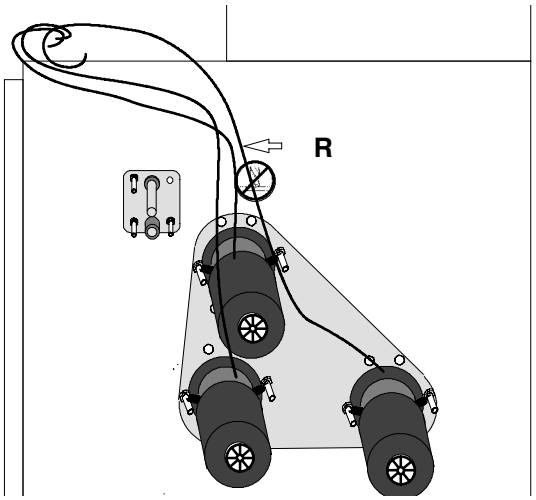
Insert the mobile connection into the bushing, by pushing the spring for earthing continuity towards the bottom.

Make sure that the nylon thread stays in the interface.

Make sure that the tulip contacts that are on the mobile connections are correctly plugged in, and that mobile connection shields are correctly earthed.

CAUTION

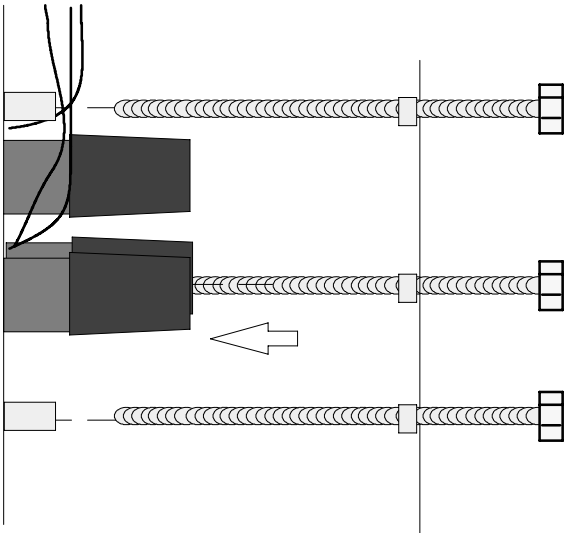
contacts must be flush with the surface of the sleeves



Do not remove the 3 nylon threads **R**, in the mean time place them on top of the …

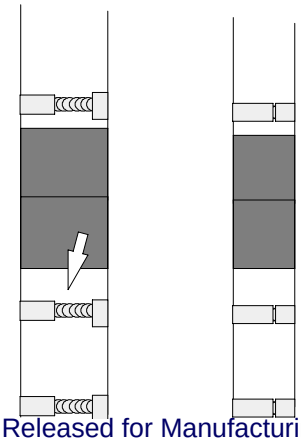
...HV cable compartment, so that they remain accessible.

plugging the double extension module in

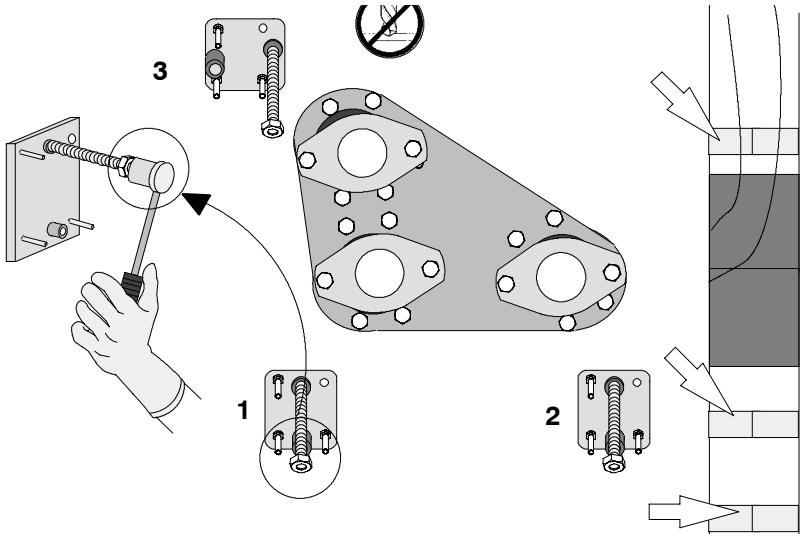


Present the double extension module with its extensibility

bushings in the axis of the mobile connections.



tightening the extension module



Each threaded rod must be progressively tightened one after the other, and with respect to the tightening order of them :
1, 2 and **3** in such a way as to bring the module closer and parallel to the substation to be extended.

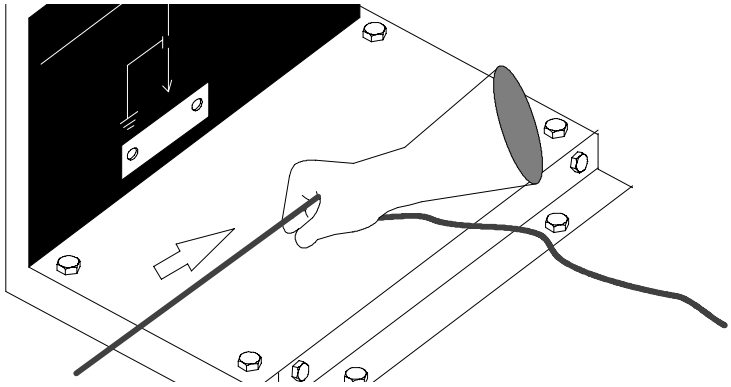
Tightening torque: 18 Nm.

The assembly has been correctly completed when the assembly stops are in contact with each other.

remove the 3 nylon threads from the bushings

CAUTION

Check the length of the 3 threads after extracting them (1 m per thread).

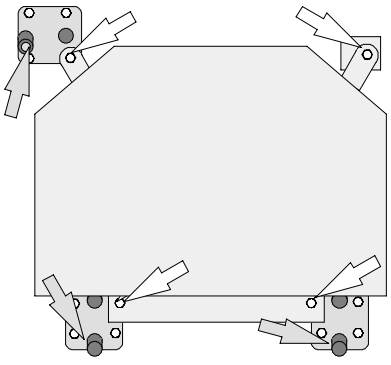


After assembly, remove the 3 nylon threads one after the other by pulling on them.

replace the protective cover

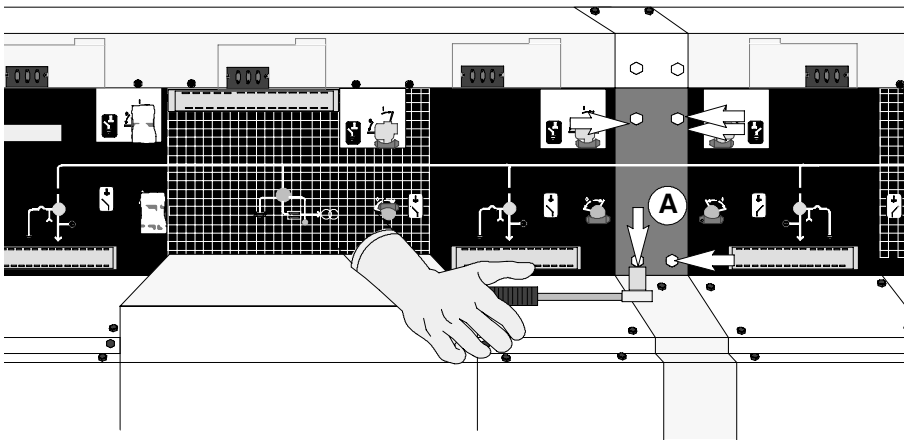
⇨ nut

⇨ plastic plug



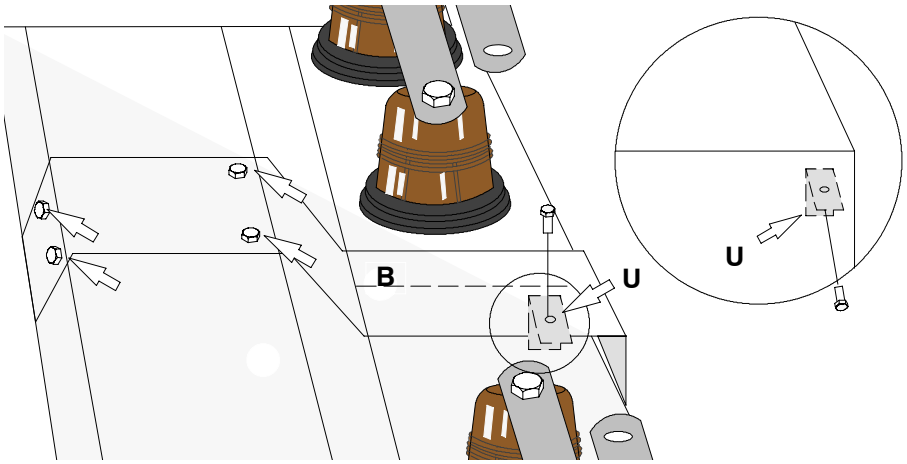
Replace the protective cover on the right side of the extension module (3 x HM6 nuts and one HM6.12 screw), then replace the 3 small plastic plug in the assembly parts.

placing the mimic panel strip



Place the strip (**A)** using the 4 screws (HM6.16) on the front plates.

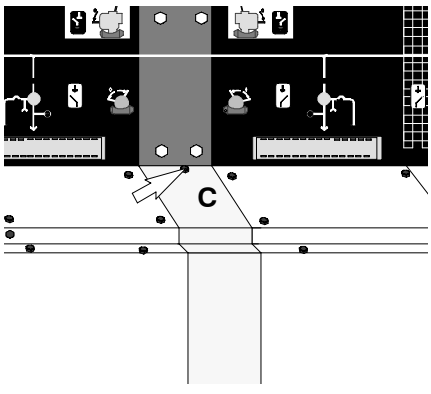
placing the trough strip



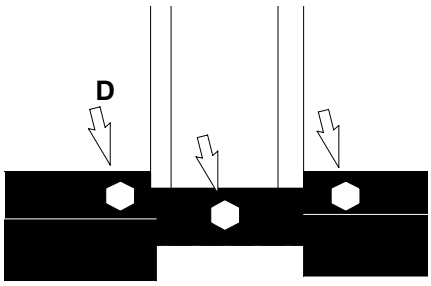
Fasten the fastening bracket (**U**).

Fasten the strip **(B**) using the 5 screws (HM6x16) on the troughs and on the bracket (**U**).

placing the strip on the front panel



Fix the strip **(C)** on the cage nut of the mimic panel strip, 1 screw (HM6 X16)...

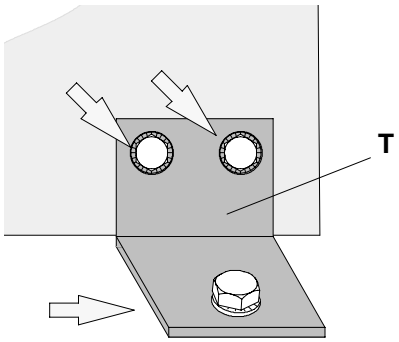


...and on the plinths using the support **(D)** 3 screws (HM6.20).

fastening to civil engineering

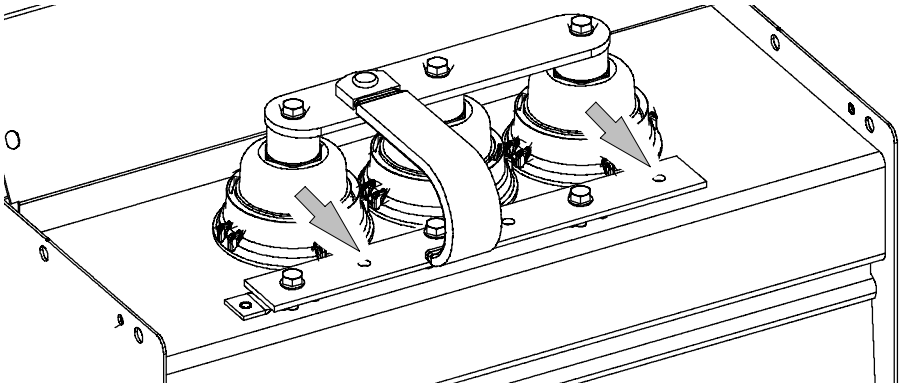
⇨ 2 screws HM8 X 16

⇨ 1 screw HM8

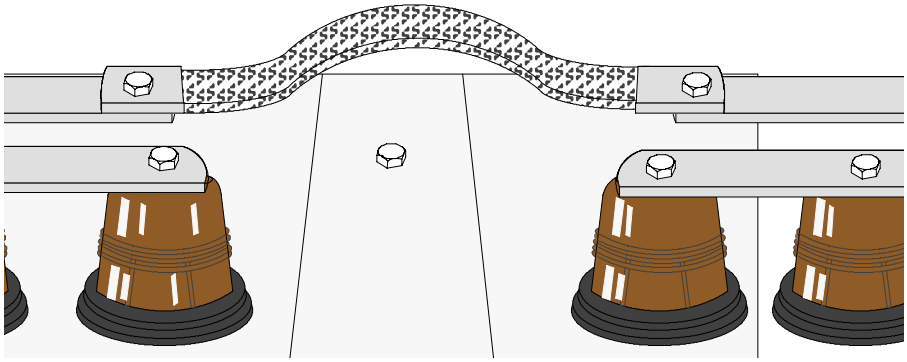


Fastening to the front plinth (2 screws HM8).
Place the lateral bracket (**T**) on the extension module.
Fastening to the floor.

earthing the extension module



The holes, signaled by arrows, are dedicated for connection.



Connect the earth leads on the 2 substations to each other via the braid.

Tightening torque: 28 Nm.
(HM8 screw x 25 + nut + “contact” washer).

connecting HV cables

Refer to the **“installation” manual ref: 07897071.**
Chap : connection instructions.

LV connection

.

Refer to the **“installation” manual ref: 07897071.**
Chapter :
LV connection.

group Schneider Electric service centers are there for:

engineering and technical
assistance
start-up
training
preventive and corrective
maintenance
adaptation work
spare parts

Call your sales representative who will put you in touch with your nearest group Schneider Electric service centers.

Schneider Electric Industries SAS

89, boulevard Franklin Roosevelt
F–92500 Rueil–Malmaison (France)
Tel : +33 (0)1 41 29 85 00

http://www.schneider–electric.com

07896870EN revision : 03

As standards, specifications and designs change from time to time, please ask for confirmation of the information given in this publication.

Conception, rédaction: Service Documentation Technique T&D

Released for Manufacturing
Printed on 2008/07/16

Edition du : **14/05/2008**